

Work Order ID 131649

Tuesday, April 21, 2015 8:00:26 AM

131649

PRELIMINARY ISSUE

Page 1

Item ID: D5240-043

Revision ID: PRELIM

Item Name: Instrument Mount Assembly

Start Date: 4/21/2015 Start Qty: 1.00

Required Date: 4/21/2015 Req'd Qty: 1.00

Reference:



Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

Approvals: Process Plan: MLS Date: 1504-21 Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D5240

PAS

100

0.00

100

Waterjet

Memo

0.00

FLOW CNC Waterjet

CUT AS PER DWG

DWG REV: PAS

FILE REV: PAS

DEBURR

6061.375 x 2.00

1 0 Jm15-4-21

102

QC2- Inspect parts off machine FAI/FAIB

0.00

102

QC

Memo

0.00

Quality Control

1 0 Jm15-4-21

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input checked="" type="checkbox"/> Suspected Unapproved <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube <input type="checkbox"/></td> <td style="width:15%;">Cross tube <input type="checkbox"/></td> <td style="width:15%;">Water Jet <input type="checkbox"/></td> <td style="width:15%;">Engineering <input checked="" type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>				Skid-tube <input type="checkbox"/>	Cross tube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input checked="" type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																																							
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Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																																																											
Date : 15-04-22		Step #: 109		QTY Effective : ①		MRB (QSI042) Approval A.P.																																																							
Description Work Order Deviation				Disposition		15.04.22																																																							
DRILL FOR HELICOIL WAS DRILLED THROUGH WALL. NO DIM FOR DEPTH ON DWG. P.C. drawing no clear should specified drill size, depth and tap size				DRILL PART IS ACCEPTABLE FOR ENGINEERING TESTING ONLY. DRAWING TO BE UPDATE TO PREVENT FUTURE PROBLEMS. <u>(PRELIM PART)</u>		Completed By J.C.-L 15/04/22																																																							
						Lead hand / Supervisor Approval Verification J.C.-L 15/04/22																																																							
						QC / QA Coordinator Approval DAS 9 9-89 15.04.22																																																							
Root Cause				FAULT CATEGORY																																																									
<table style="width:100%; border: none;"> <tr> <td style="width:50%;">Environment <input type="checkbox"/></td> <td style="width:50%;">No Re-verification <input type="checkbox"/></td> </tr> <tr> <td>Design <input type="checkbox"/></td> <td>Operator <input type="checkbox"/></td> </tr> <tr> <td>Doc/Data <input checked="" type="checkbox"/></td> <td>Offset/Setup <input type="checkbox"/></td> </tr> <tr> <td>Equip/Tooling <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> </tr> <tr> <td>Handling/Pre <input type="checkbox"/></td> <td>Training <input type="checkbox"/></td> </tr> <tr> <td>Material <input type="checkbox"/></td> <td>Use for Testing <input type="checkbox"/></td> </tr> <tr> <td>Internal Transport <input type="checkbox"/></td> <td>Poor Information <input type="checkbox"/></td> </tr> <tr> <td>Tribal Knowledge <input type="checkbox"/></td> <td>Rushing <input type="checkbox"/></td> </tr> <tr> <td>LOA <input type="checkbox"/></td> <td>Product Improvement <input type="checkbox"/></td> </tr> <tr> <td>Substation <input type="checkbox"/></td> <td>Process Improvement <input type="checkbox"/></td> </tr> <tr> <td>Past Expiry Date <input type="checkbox"/></td> <td>Manufacturing Process <input type="checkbox"/></td> </tr> <tr> <td>Misidentified <input type="checkbox"/></td> <td>Past Due <input type="checkbox"/></td> </tr> </table>				Environment <input type="checkbox"/>	No Re-verification <input type="checkbox"/>	Design <input type="checkbox"/>	Operator <input type="checkbox"/>	Doc/Data <input checked="" type="checkbox"/>	Offset/Setup <input type="checkbox"/>	Equip/Tooling <input type="checkbox"/>	Supplier <input type="checkbox"/>	Handling/Pre <input type="checkbox"/>	Training <input type="checkbox"/>	Material <input type="checkbox"/>	Use for Testing <input type="checkbox"/>	Internal Transport <input type="checkbox"/>	Poor Information <input type="checkbox"/>	Tribal Knowledge <input type="checkbox"/>	Rushing <input type="checkbox"/>	LOA <input type="checkbox"/>	Product Improvement <input type="checkbox"/>	Substation <input type="checkbox"/>	Process Improvement <input type="checkbox"/>	Past Expiry Date <input type="checkbox"/>	Manufacturing Process <input type="checkbox"/>	Misidentified <input type="checkbox"/>	Past Due <input type="checkbox"/>	<table style="width:100%; 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OTHER : _____																																																													

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Cross tube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment <input type="checkbox"/> Design <input type="checkbox"/> Doc/Data <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Handling/Pre <input type="checkbox"/> Material <input type="checkbox"/> Internal Transport <input type="checkbox"/> Tribal Knowledge <input type="checkbox"/> LOA <input type="checkbox"/> Substation <input type="checkbox"/> Past Expiry Date <input type="checkbox"/> Misidentified <input type="checkbox"/>	No Re-verification <input type="checkbox"/> Operator <input type="checkbox"/> Offset/Setup <input type="checkbox"/> Supplier <input type="checkbox"/> Training <input type="checkbox"/> Use for Testing <input type="checkbox"/> Poor Information <input type="checkbox"/> Rushing <input type="checkbox"/> Product Improvement <input type="checkbox"/> Process Improvement <input type="checkbox"/> Manufacturing Process <input type="checkbox"/> Past Due <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Wave/Twist in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/> Set-up <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Drill Holes <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Off-set <input type="checkbox"/> Mislabeled <input type="checkbox"/> Fit/Function <input type="checkbox"/> Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Misread <input type="checkbox"/> Turning Sequence <input type="checkbox"/>
OTHER : _____					

Tuesday, April 21, 2015 8:00:27 AM

131649

PRELIMINARY ISSUE

Page 3

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Item Name: Instrument Mount Assembly

Start Date: 4/21/2015 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 4/21/2015 **Req'd Qty:** 1.00 *** 1 ***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130 Chemical Conversion Coat per QSI005 4.1

0.00

130

0.00

HandFinish

Memo

Hand Finishing

140 QC7-Inspect Chemical Conversion Coat

0.00

140

0.00

QC

Memo

Quality Control

DAS

38

9-85

APR 23 2015

150	:	0.00
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150

0.00

Small Fab

Memo

Small Fab

insert helicoils as per dwg

APR 24 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Cross tube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause <div style="display: flex; justify-content: space-between;"> <div> Environment <input type="checkbox"/> Design <input type="checkbox"/> Doc/Data <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Handling/Pre <input type="checkbox"/> Material <input type="checkbox"/> Internal Transport <input type="checkbox"/> Tribal Knowledge <input type="checkbox"/> LOA <input type="checkbox"/> Substation <input type="checkbox"/> Past Expiry Date <input type="checkbox"/> Misidentified <input type="checkbox"/> </div> <div> No Re-verification <input type="checkbox"/> Operator <input type="checkbox"/> Offset/Setup <input type="checkbox"/> Supplier <input type="checkbox"/> Training <input type="checkbox"/> Use for Testing <input type="checkbox"/> Poor Information <input type="checkbox"/> Rushing <input type="checkbox"/> Product Improvement <input type="checkbox"/> Process Improvement <input type="checkbox"/> Manufacturing Process <input type="checkbox"/> Past Due <input type="checkbox"/> </div> </div>		FAULT CATEGORY <div style="display: flex; justify-content: space-between;"> <div> Pressure/Forced <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Wave/Twist in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> </div> <div> Temperature/Cure <input type="checkbox"/> Set-up <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Drill Holes <input type="checkbox"/> </div> <div> Power Loss/Surge <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Off-set <input type="checkbox"/> Mislabelled <input type="checkbox"/> Fit/Function <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> </div> <div> Positioned Wrong <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Misread <input type="checkbox"/> Turning Sequence <input type="checkbox"/> </div> </div>			
<div style="display: flex; justify-content: space-between;"> <div> OTHER : <input type="checkbox"/> </div> </div>					

Work Order ID 131649

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131649**PRELIMINARY ISSUE**

Page 4

Item ID: D5240-043

Accept

N900040100Setup Start ***NS1***

Revision ID: PRELIM

Stop ***NS2***

Item Name: Instrument Mount Assembly

Start Date: 4/21/2015 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 4/21/2015 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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160

QC5- Inspect part completeness to step on W/O

0.00

160

QC

Memo

0.00

Quality Control

APR 24 2015

170

Spray Painting per QSI005 4.2

0.00

170

SprayPaint

Memo

0.00

Spray Painting

prime and paint as per dwg
PRIMER BATCH: 131846
PAINT BATCH: 131561

MASK THREADED HOLES

DAS
41
9-89

15-4-28

180

QC5- Inspect Part Finish

0.00

180

QC

Memo

0.00

Quality Control

DAS
38
9-89

APR 29 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube <input type="checkbox"/></td> <td style="border: none;">Cross tube <input type="checkbox"/></td> <td style="border: none;">Water Jet <input type="checkbox"/></td> <td style="border: none;">Engineering <input type="checkbox"/></td> </tr> <tr> <td style="border: none;">Machining <input type="checkbox"/></td> <td style="border: none;">Small Fab <input type="checkbox"/></td> <td style="border: none;">Prod. Eng. Coord. <input type="checkbox"/></td> <td style="border: none;">Quality <input type="checkbox"/></td> </tr> <tr> <td style="border: none;">Thermoforming <input type="checkbox"/></td> <td style="border: none;">Finishing <input type="checkbox"/></td> <td style="border: none;">Rec/Store/Packaging <input type="checkbox"/></td> <td style="border: none;">Other <input type="checkbox"/></td> </tr> <tr> <td style="border: none;">Large Fab <input type="checkbox"/></td> <td style="border: none;">Composite <input type="checkbox"/></td> <td style="border: none;">Supplier <input type="checkbox"/></td> <td style="border: none;"></td> </tr> </table>						Skid-tube <input type="checkbox"/>	Cross tube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
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Date :		Step #:		QTY Effective :			MRB (QS1042) Approval																		
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Page 5

Item ID: D5240-043

Accept

N9000040100Setup Start ***NS1***

Revision ID: PRELIM

Item Name: Instrument Mount Assembly

Stop ***NS2***

Start Date: 4/21/2015 Start Qty: 1.00

1

Cust Item ID:

Required Date: 4/21/2015 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

Identify as per dwg & Stock Location: PRELIM

0.00

190

Packaging

Memo

0.00

① 150429

DAS

9

9-89

Packaging

200

QC21- Final Inspection - Work Order Release

0.00

200

QC

Memo

0.00

Quality Control

MCS APR 29 2015

POSITIVE RECALL

EFFECTIVE 150421 AUTH MCS

RELEASED _____ DATE _____

RDIS-1004-02

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Cross tube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment <input type="checkbox"/>	No Re-verification <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>				
Design <input type="checkbox"/>	Operator <input type="checkbox"/>	Bending <input type="checkbox"/>	Set-up <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>				
Doc/Data <input type="checkbox"/>	Offset/Setup <input type="checkbox"/>	Centre Not Concentric <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>				
Equip/Tooling <input type="checkbox"/>	Supplier <input type="checkbox"/>	Cracks <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>	Weld <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>				
Handling/Pre <input type="checkbox"/>	Training <input type="checkbox"/>	Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>				
Material <input type="checkbox"/>	Use for Testing <input type="checkbox"/>	Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>	Part Moved <input type="checkbox"/>				
Internal Transport <input type="checkbox"/>	Poor Information <input type="checkbox"/>	Crushing <input type="checkbox"/>	Countersink <input type="checkbox"/>	Off-set <input type="checkbox"/>	Drawing <input type="checkbox"/>				
Tribal Knowledge <input type="checkbox"/>	Rushing <input type="checkbox"/>	Heat Treat <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Finish <input type="checkbox"/>				
LOA <input type="checkbox"/>	Product Improvement <input type="checkbox"/>	Wave/Twist in Tube <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Fit/Function <input type="checkbox"/>	Misread <input type="checkbox"/>				
Substation <input type="checkbox"/>	Process Improvement <input type="checkbox"/>	Marks/Chatter <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Turning Sequence <input type="checkbox"/>				
Past Expiry Date <input type="checkbox"/>	Manufacturing Process <input type="checkbox"/>	OTHER : _____							
Misidentified <input type="checkbox"/>	Past Due <input type="checkbox"/>								

Picklist Print

Tuesday, April 21, 2015 8:00:32 AM

PRELIMINARY ISSUE

Page 1

Work Order ID: 131649

131649

Parent Item: D5240-043

D5240-043

Parent Item Name: Instrument Mount Assembly

Start Date: 4/21/2015

Required Date: 4/21/2015

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 15-04-20 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B0.375X02.00 0		Purchased	No				f	17.8000		<u>1</u>			

M6061T6B0 375X02 000

6061-T6 Bar .375 x 2.00

**

Jm15-4-21

Location	Loc Qty	Loc Code
MAT001	17.8	
M126075	5.8	
M129845	12	

126075

MS21209C0815

Purchased

No

Each

23.0000

2

MS21209C0815

Heli Coil, screw locking, red

**

FF

APR 24 2015

Location	Loc Qty	Loc Code
ST299	23	
124328	3	
124525	20	

2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

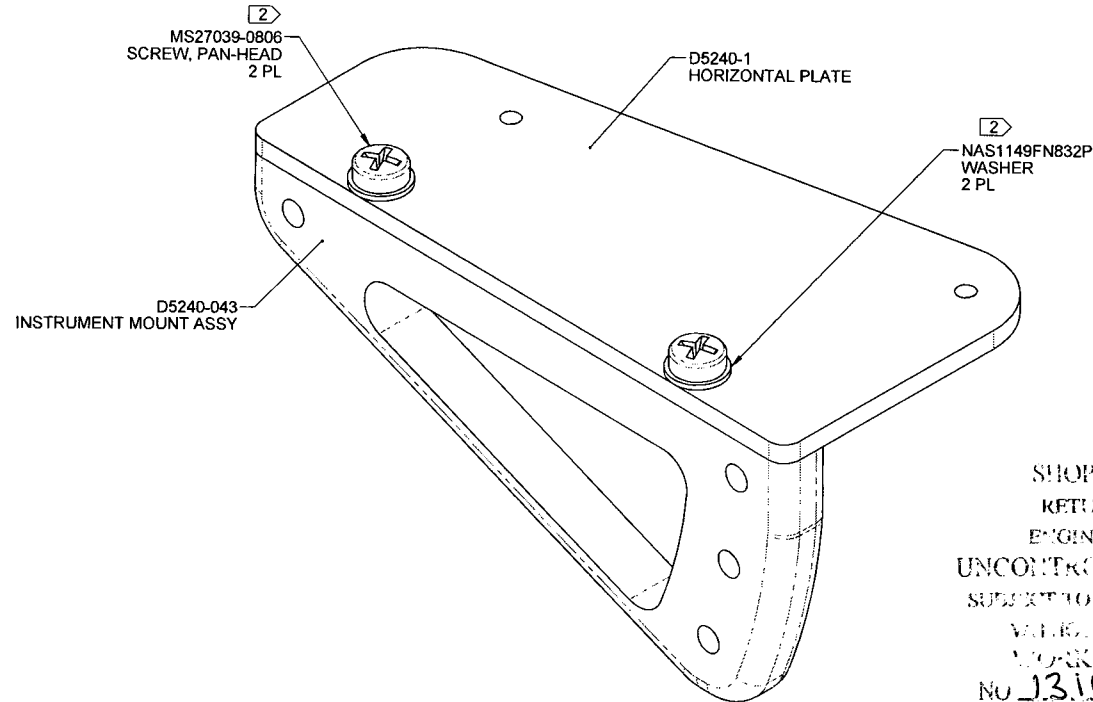
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Cross tube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation.		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
<div style="display: flex;"> <div style="flex: 1;"> Environment <input type="checkbox"/> Design <input type="checkbox"/> Doc/Data <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Handling/Pre <input type="checkbox"/> Material <input type="checkbox"/> Internal Transport <input type="checkbox"/> Tribal Knowledge <input type="checkbox"/> LOA <input type="checkbox"/> Substation <input type="checkbox"/> Past Expiry Date <input type="checkbox"/> Misidentified <input type="checkbox"/> </div> <div style="flex: 1;"> No Re-verification <input type="checkbox"/> Operator <input type="checkbox"/> Offset/Setup <input type="checkbox"/> Supplier <input type="checkbox"/> Training <input type="checkbox"/> Use for Testing <input type="checkbox"/> Poor Information <input type="checkbox"/> Rushing <input type="checkbox"/> Product Improvement <input type="checkbox"/> Process Improvement <input type="checkbox"/> Manufacturing Process <input type="checkbox"/> Past Due <input type="checkbox"/> </div> </div>	<div style="display: flex;"> <div style="flex: 1;"> Pressure/Forced <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Wave/Twist in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> </div> <div style="flex: 1;"> Temperature/Cure <input type="checkbox"/> Set-up <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Drill Holes <input type="checkbox"/> </div> </div>	<div style="display: flex;"> <div style="flex: 1;"> Power Loss/Surge <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Off-set <input type="checkbox"/> Mislabelled <input type="checkbox"/> Fit/Function <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> </div> <div style="flex: 1;"> Positioned Wrong <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Misread <input type="checkbox"/> Turning Sequence <input type="checkbox"/> </div> </div>			
OTHER : <input type="checkbox"/>					

PRELIMINARY ISSUE

ITEM	QTY	P/N	DESCRIPTION
	X	D5240-041	SILL BRACKET ASSY
1	1	D5240-1	HORIZONTAL PLATE
2	1	D5240-043	INSTRUMENT MOUNT ASSY
3	2	MS27039-0806	SCREW, PAN-HEAD
4	2	NAS1149FN832P	WASHER



D5240-041 SILL BRACKET ASSY

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO ALIGNMENT
VALIDITY NOTICE
WORK ORDER
NO 131649 MJS

1504-21

- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: PAINT SCREWS AND WASHERS
PAINT MATTE BLACK PER DART QSI 005 4.2.2.3
 - 3) TOLERANCES: N/A
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: SEE -3
 - 7) WEIGHT: 0.21 lbs

PRELIMINARY ISSUE

A	NEW ISSUE	AJS	15.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS		
DRAWN	AJS		
CHECKED	AP		
MFG. APPR.	JLM		
APPROVED			
DE APPR.			
DATE	15.04.16		

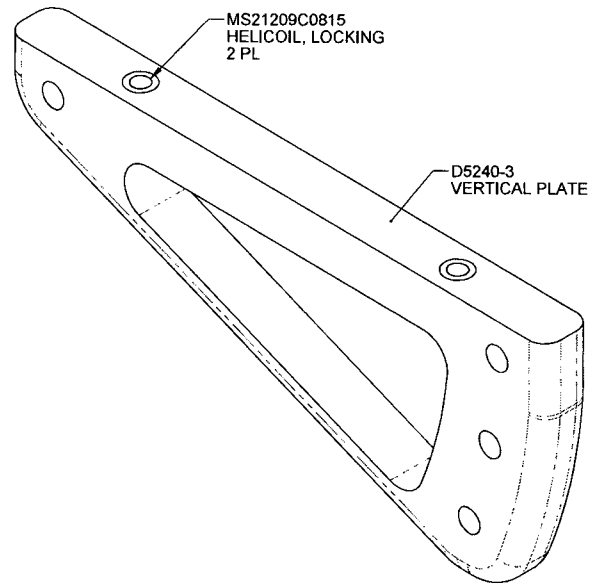
DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D5240** REV. A5
SHEET 1 OF 4
TITLE **SILL BRACKET ASSY** SCALE NTS

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PRELIMINARY ISSUE

ITEM	QTY -043	P/N	DESCRIPTION
	X	D5240-043	INSTRUMENT MOUNT ASSY
1	1	D5240-3	VERTICAL PLATE
2	2	MS21209C0815	HELICOIL, LOCKING



D5240-043 INSTRUMENT MOUNT ASSY

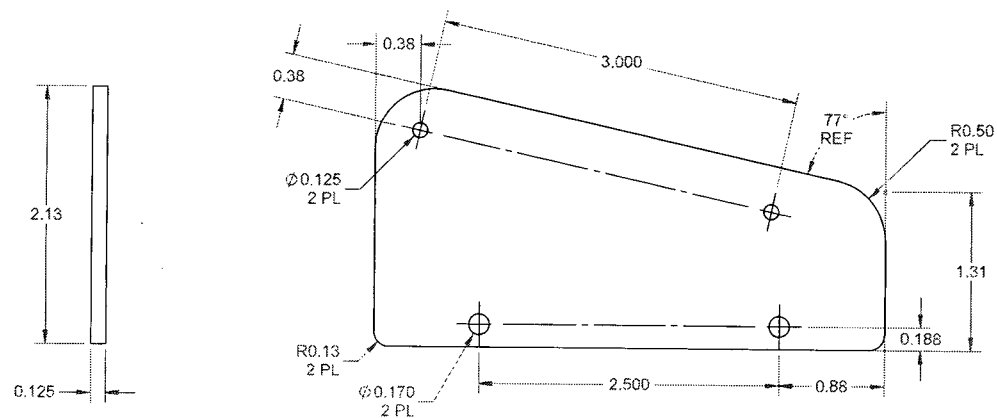
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: N/A
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: SEE -3
- 7) WEIGHT: 0.12 lbs

PRELIMINARY ISSUE

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AP	DRAWING NO.	REV. A5
MFG. APPR.	JLM	D5240	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		SILL BRACKET ASSY	NTS
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PRELIMINARY ISSUE



D5240-1 HORIZONTAL PLATE

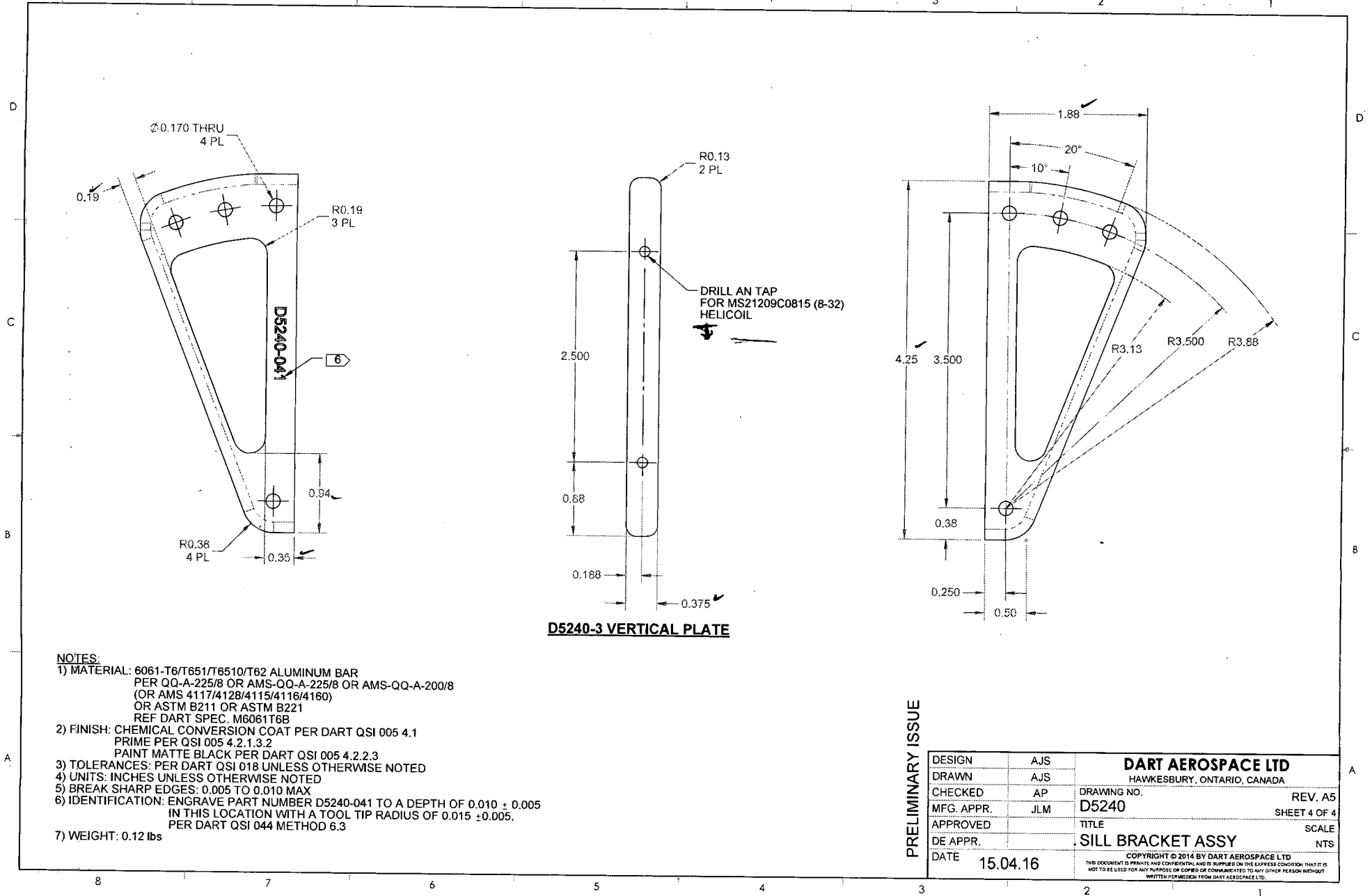
NOTES:

- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET
PER QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027
OR ASTM B209
REF DART SPEC. M6061T6S
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME PER QSI 005 4.2.1.3.2
PAINT MATTE BLACK PER DART QSI 005 4.2.2.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: SEE -3
- 7) WEIGHT: 0.09 lbs

PRELIMINARY ISSUE

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AP	DRAWING NO.	REV. A5
MFG. APPR.	JLM	D5240	SHEET 3 OF 4
APPROVED		TITLE	SCALE
DE APPR.		SILL BRACKET ASSY	NTS
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PRELIMINARY ISSUE





SERVICE CENTER METALS
5850 Quality Way
Prince George, VA 23875

CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

OUR ORDER NUMBER	ITEM
173665	2

BILL TO Ryerson Canada, Inc. (Toronto)	MANIFEST NUMBER 186997	DIE NUMBER RB0115	DATE OF SHIPMENT 4/10/2013
SHIP TO Ryerson Canada, Inc. (Montreal)	CUSTOMER PO 733079	ALLOY / TEMPER 6061-T6511	SALESPERSON David Schroeder (Canada)
Quantity Certified 508 lbs 24pcs	CUSTOMER PART NUMBER 5131-7162	DESCRIPTION SCRB 750x2.000	

CERTIFICATION
ASTM-B221-12a StencilCont

SPECIFICATION
AMS-QQA-200/8 - 1997

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCM extrusions are manufactured in the USA.

Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6

Mechanical Properties		Test Date	Ultimate Tensile Strength (KSI)		Yield Strength (KSI)		Percent Elongation	
Tests	Lot No.		min	max	min	max	min	max
9	201306611	4/9/13	46.70	50.10	45.10	48.80	11.55	13.98

8366/20

Chemical Composition for Aluminum Alloy 6061

Cast Number	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	AL	Others		Melt Source:
											Each	Total	
032135	6061	0.65	0.30	0.30	0.10	0.90	0.08	0.05	0.02	97.60	0.05	0.15	United States of America
032436	6061	0.66	0.30	0.30	0.10	0.91	0.09	0.05	0.02	97.57	0.05	0.15	United States of America
C07H0705	6061	0.71	0.27	0.33	0.09	0.88	0.10	0.01	0.01	97.60	0.05	0.15	United States of America

Calvin J. Wiggins

Calvin J. Wiggins, Director of Quality & Technical Services

Print Date: 4/10/2013

Rev. 9/23/11 - UMS

DATE DELIVERED

4/10/13

PAGE

6/19/2013 6:00:13 PM

Ryerson

P.O. - 20192 S.O. - 310685

DART AEROSPACE LTD.